

Title (en)  
LITHIUM SECONDARY BATTERY

Title (de)  
LITHIUMSEKUNDÄRBATTERIE

Title (fr)  
ACCUMULATEUR AU LITHIUM

Publication  
**EP 3823073 A4 20210825 (EN)**

Application  
**EP 19878357 A 20191030**

Priority  
• KR 20180130620 A 20181030  
• KR 2019014498 W 20191030

Abstract (en)  
[origin: EP3823073A1] The present invention relates to a lithium secondary battery manufactured to a negative electrode free battery and having lithium metal formed on a negative electrode current collector by charge, and using an electrolyte including a sacrificial salt. The lithium secondary battery forms lithium metal while being blocked from the atmosphere, and thereby fundamentally improves an existing problem caused by high reactivity of lithium metal, and, by including a sacrificial salt in an electrolyte, reduces lithium consumption caused by an irreversible reaction of a negative electrode, which may prevent decline in the battery capacity and lifetime properties.

IPC 8 full level  
**H01M 10/0567** (2010.01); **H01M 4/04** (2006.01); **H01M 4/13** (2010.01); **H01M 10/052** (2010.01); **H01M 10/0568** (2010.01); **H01M 10/44** (2006.01)

CPC (source: EP KR US)  
**H01M 4/0404** (2013.01 - US); **H01M 4/0447** (2013.01 - EP KR); **H01M 4/13** (2013.01 - KR); **H01M 4/134** (2013.01 - EP);  
**H01M 4/139** (2013.01 - US); **H01M 4/1395** (2013.01 - EP); **H01M 4/366** (2013.01 - EP); **H01M 4/382** (2013.01 - EP);  
**H01M 4/485** (2013.01 - EP); **H01M 4/505** (2013.01 - EP); **H01M 4/525** (2013.01 - EP); **H01M 4/5825** (2013.01 - EP); **H01M 4/62** (2013.01 - EP);  
**H01M 10/052** (2013.01 - EP KR US); **H01M 10/0565** (2013.01 - US); **H01M 10/0567** (2013.01 - EP KR US); **H01M 10/0568** (2013.01 - EP KR US);  
**H01M 10/44** (2013.01 - US); **H01M 10/446** (2013.01 - KR); **H01M 2300/0025** (2013.01 - EP); **H01M 2300/0068** (2013.01 - EP);  
**Y02E 60/10** (2013.01 - EP)

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GB2608605A

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3823073 A1 20210519; EP 3823073 A4 20210825**; CN 112514133 A 20210316; KR 20200049668 A 20200508; US 2021273262 A1 20210902

DOCDB simple family (application)  
**EP 19878357 A 20191030**; CN 201980050852 A 20191030; KR 20190136866 A 20191030; US 201917265400 A 20191030